

ORIGINAL

Decision No. 88129 NOV 22 1977

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of INVERNESS WATER COMPANY to increase its rates and charges for its water system serving the unincorporated communities of Inverness, Seahaven Subdivision No. 1, and vicinity, in Marin County.

Application No. 56285
(Filed February 23, 1976;
amended September 28, 1976)

Jeremiah F. Hallisey, Attorney at Law, for applicant.

Richard J. Massa and Allen H. Pierce, Attorney at Law, for Inverness Water Committee, protestant.

Joseph Garcia, Attorney at Law, for California Department of Consumer Affairs, interested party.

Mary Carlos, Attorney at Law, and Ernest Knolle, for the Commission staff.

INTERIM OPINION

Inverness Water Company, a wholly owned subsidiary of Citizens Utilities Company (Citizens-Delaware), requests an increase in rates for metered water service designed to increase annual revenues in the test year by \$39,800.

Public hearing was held before Examiner Daly at Inverness on January 18, 19, and 20, 1977, and at San Francisco on January 21, 1977, with the matter being submitted on concurrent briefs, which were filed on April 22, 1977. By an Examiner's Ruling dated May 26, 1977, the matter was reopened, pursuant to a motion filed by applicant, to introduce Exhibit 41. Further hearing was held at San Francisco on June 10, 1977, and the matter was again taken under submission. Copies of the application were served upon interested parties and notice of hearing was published, posted, and mailed in accordance with the Commission's Rules of Practice and Procedure.

Because of the serious service problems affecting this utility and the need for improved management and operations practices, this Commission will issue an interim order at this time. The interim order will adopt results of operations, and require the utility to develop a plan of system improvements including associated costs and timetable to bring applicant's level of service and water quality up to an acceptable level. The plan or some modification of it must be approved by the Executive Director. A fair rate of return will be determined after the approved plan for improvement has been fully completed.

The interim order will further provide for increased rates consistent with an additional \$11,900 which we believe is appropriate at this time to defray increased costs.

Citizens-Delaware operates or has subsidiary utility companies providing gas, electric, telephone, water, and waste water service in more than 500 communities in the United States. Its headquarters are located in High Ridge Park, Stamford, Connecticut. It actively engages in administrative direction of applicant performing administrative, accounting, financial, tax, engineering, and purchasing services for it.

Until recently the service area herein considered consisted of two separate systems, Inverness and Sea Haven. The original water system in the Inverness area was installed between the years 1890 and 1900. The Sea Haven system was constructed in 1949. On November 3, 1958, Mr. Larry H. Marks, Jr., was authorized to purchase and consolidate both systems under the name of Inverness Water Company. In April 1960, Mr. Marks sold the operations to the Inverness Water Company, a California corporation, which he had formed. In June 1960, all of the stock was purchased by Citizens-Delaware.

The water source is from seven creek diversions, one spring source, and is supplemented by three wells. The streams flow through deep ravines, heavily overgrown with trees, brush, and ferns. Water is derived from the diversions by means of pipes inserted through the structure having screened inlets. Water from the Lower Sea Haven diversion is pumped into the system by the McConnell Valley Pump. Storage that is provided in the distribution system includes 14 tanks having a total capacity of 260,000 gallons.

As of December 31, 1974, there were approximately 35,000 feet of distribution main in service ranging from 1 to 6 inches in diameter. As of the same date, applicant was servicing 394 metered customers.

Rates

Applicant proposes to increase rates as indicated by the following comparison of present and proposed rates.

METERED SERVICEAPPLICABILITY

Applicable to all metered water service furnished on an annual basis.

TERRITORY

Inverness and vicinity, Marin County.

RATES

Monthly Quantity Rates:	<u>Per Meter Per Month</u>	
	<u>Present</u>	<u>Proposed</u>
First 400 cu.ft. or less	\$8.50	\$14.90
Next 600 cu.ft., per 100 cu.ft. ..	.80	1.40
Over 1,000 cu.ft., per 100 cu.ft. ..	.70	1.22

Annual Minimum Charge:	<u>Per Meter Per Year</u>	
	<u>Present</u>	<u>Proposed</u>
For 5/8 x 3/4-inch meter	\$102.00	\$178.80
For 3/4-inch meter	138.00	241.85
For 1-inch meter	204.00	357.50
For 1-1/2-inch meter	342.00	599.30
For 2-inch meter	480.00	841.20

The Annual Minimum Charge will entitle the customer to the quantity of water each month which one-twelfth of the Annual Minimum Charge will purchase at the Monthly Quantity Rates.

PRIVATE FIRE PROTECTION SERVICEAPPLICABILITY

Applicable to all meter service furnished to privately owned fire protection systems.

TERRITORY

Inverness and vicinity, Marin County.

RATE

	<u>Per Month</u>	
	<u>Present</u>	<u>Proposed</u>
For each inch of diameter of service connection.	\$1.50	\$2.65

PUBLIC FIRE HYDRANT SERVICE

APPLICABILITY

Applicable to all fire hydrant service furnished to municipalities, duly organized fire districts and other political subdivisions of the State.

TERRITORY

Inverness and vicinity, Marin County.

RATES

	<u>Per Month</u>	
	<u>Present</u>	<u>Proposed</u>
For each wharf-type hydrant	\$1.00	\$1.75
For each standard hydrant	1.50	2.65

Service and Quality of Water

The staff introduced the testimony of a sanitary engineer representing the Department of Health. The following is a summarization:

Mr. Richard McMillan

District engineer in charge of the San Francisco Bay District, which covers five counties including Marin. Prepared a report on the Inverness water system (Exhibit 10).

Found that in recent years problems of reliability of the Inverness system have degraded to a point that representatives of the service community have formed an action group for the purpose of obtaining relief for water service complaints. The major concern of the group is the delivery of adequate quantities of water at a consistent rate and that it be of an acceptable quality.

Sources

During times of rainfall the streams rapidly become disturbed and begin to clear only after rainfall ceases.

The spring source is in an isolated area on the Inverness Ridge at approximately 660 feet elevation. It consists of two groups of springs. At present, they are subject to surface water contamination.

Of the three wells, two produce water which exceeds limits for iron and manganese. The third, which is located in First Valley adjacent to the treatment plant, is a good well.

Treatment

Chlorination is accomplished by means of manually-controlled, electrically-driven hypo-chlorinators, none of which is equipped with alarms or fail-safe equipment.

With the exception of the McConnell Valley Pump Station, all of the water being chlorinated flows by gravity to the storage tanks. Preventive measures have not been taken to stop the flow of water when a failure of the chlorination system occurs. When there are power outages, chlorinator failures, or failures to maintain an adequate supply of hypochlorite solution in the tank, unchlorinated water continues to flow into the system.

Water from the well and from the surface diversions in First Valley is filtered. The other surface diversions and the spring source are not filtered.

Storage and Distribution

The redwood tanks all have bands which require maintenance and in some cases need replacing. There are leaks in the Kehoe and Colby tanks.

Approximately 17,300 feet of main is 2 inches in diameter, and approximately 2,570 feet is 1- $\frac{1}{2}$ inches in diameter. Many of the mains are deteriorated beyond repair, or do not meet minimum pressure requirements.

The system has had significant low-pressure and water outage problems which have been particularly severe in the Madrone booster and upper Perth Way areas.

Maintenance and Operation

The system is operated by one man living in the area under the supervision of the district manager in Guerneville. The operation has been poor in the past due to a great turnover and the inexperience of the operators, which have resulted in chlorination failures and water outages. Mains are flushed periodically, but not on a regular schedule so as to remove sediment deposited by the unfiltered water.

Applicant has employed the services of a Class 3 certificated operator to maintain the system. He has

taken a strong interest in the efficient operation of its facilities.

Quantity of Supply

Peak flows for the maximum month condition can easily exceed three times the daily production of 250,000 gallons. Unless water supply conditions improve it may become necessary within the near future to curtail additional growth in the area.

Quality

The rain water consistently fails to meet bacteriological standards for furnished water. Unless the water receives reliable treatment, the delivered water will not meet drinking water bacteriological standards. During the five-month period July through November 1975, the department spent a great deal of time trying to obtain satisfactory operation of the chlorinators and did extensive sampling to determine water quality. Failure to meet bacteriological standards generally coincided with a breakdown in maintenance and operation of chlorination facilities resulting in erratic disinfection. During this period a majority of samples collected were negative for coliform bacteria, but in the aggregate, each month the bacteriological standards were not met.

The Department of Health reached conclusions and made recommendations as follows:

Conclusions

1. During and following rainfall, the water supplied by Inverness Water Company has been excessively turbid.
2. During the calendar year 1975, water supplied by Inverness Water Company intermittently failed to meet state and federal bacteriological requirements over a five-month period, July through November.
3. The chlorination equipment has not been operated reliably. As a consequence chlorination was intermittent. Careful operation can improve this situation but cannot produce fail-safe disinfection. This will require physical changes with the equipment.
4. Past operators hired by the company have been poorly qualified to operate the water system, and as a result the system has been poorly operated. The present operator is doing a far better job than previous operators.

5. The water system has had low pressures and water-outage problems. Among other things the water system contains a sizable amount of undersized (2-inch or smaller diameters) distribution mains. More information is needed concerning the causes of the low pressures and water outages along with the effect they may be having on water pressures and fire protection.

Recommendations

1. The water company should be required to provide a minimum of filtration for all surface services.
2. The water company should be required to provide chlorination which will be reliable and provide a continuous and consistent chlorine residual regardless of variations in flow.
3. The water company should be required to submit detailed information to the Public Utilities Commission, the State Department of Health, and the water consumers supplied by the water system as to causes of the low pressures and water outages, as well as the age and condition of the undersized distribution mains and the effect they have on the water pressures and fire protection. Where this information indicates the need for main replacement and/or other improvements in order to comply with pressure requirements set forth in Public Utilities Commission General Order No. 103, such replacement and/or improvements should be undertaken immediately. Where this information indicates the need for additional main replacement and/or improvements in order to provide better fire protection, the company should be required to determine the costs for such replacement and/or improvements and the water consumers with the aid of the Public Utilities Commission should determine whether or not such replacement and/or improvements will be made.
4. The water company should be required to employ competent, trained operators.

The Inverness Water Committee, protestant herein, was formed by the Inverness Association, a voluntary citizens' organization incorporated in the 1930s. It functions as a quasi

local government and it seeks to protect and advance the interests of the property owners and the residents of the Inverness area.

The committee introduced the testimony of a number of witnesses. Their testimony is summarized as follows:

1. Katherine Holbrook

The Inverness Association was incorporated in the 1930s. She is president. It has approximately 400 members. She met with the general manager of applicant on October 28, 1974. Discussed poor quality of water, inadequate quantity, poor service, high rates, and the installation of a new filtration plant. His response was totally negative. He did not seem to understand or care to understand the community. Sent out questionnaires relating to water service. There was a water shortage a couple of summers ago. The water tastes and smells bad and after storms it is very dirty. The water has the taste and odor of clorox. Some mornings the odor is overpowering.

2. Loretta B. Chase

Has lived in Inverness for nine and a half years. In 1974 drew up and distributed questionnaire regarding water service in Inverness. Approximately 500 questionnaires were distributed and 125 were filled out and returned. A total of 79 claimed to have problems because of low water pressure; 54 had water outages; 101 indicated that the water was turbid; 67 indicated that the water had a disagreeable chlorine taste; 13 related sickness to the water; 12 indicated that they found it necessary to use either an auxiliary pump, storage tank, or filter; 10 claimed that household machinery had suffered premature failure; 10 had problems with sediment in the water; 55 indicated that they were generally satisfied with the water service and 59 indicated that they were not satisfied; 11 had billing problems; 13 had difficulty in communicating with the company; and 23 complained about the high cost of water.

She has had problems with low pressure, outages, turbidity, chlorine taste that was disagreeable, and the smell of chlorine. When she tries to call the company she gets a recording referring her to two other numbers to call and neither of them answers.

3. William Edward Booras

Patternmaker who resides at Point Reyes. Was employed by applicant from October 1970 to August 1972 and again from April 1975 to July 1975. Answered an ad in local newspaper for part-time manager of local water company - no experience needed. Was hired on a part-time basis to take care of the chlorination, read the meters, and collect bills at a salary of \$430 a month.

There were maps of the water system, but they were inaccurate and very sketchy. Reported to the company that maps were inadequate and that good diagrams and an instruction manual would save much time. Could not complete all of the work in the expected 25-hour week because the area, which included Sea Haven, Inverness, and Limantour, was too much to cover. The tanks at New Bailey Spring were old and rotten. When trouble originated at the springs he had to go back to the ravines using old trails that are not completely clear and are very slippery. Reported to the company that repairs on the springs and tanks were necessary. Spent a great deal of time repairing leaks in old pipes that had rusted through. At times they would send someone from Guerneville to help repair leaks. The Pinehill tank would drain water from the Sea Haven tank because it was lower. Because the maps failed to indicate this information no one at the Guerneville office knew about it. When this happened all the Sea Haven customers would be without water. Left the job in August 1972 because the company expected him to "put in whatever hours are necessary to keep the company running." He scheduled himself to 25 hours a week and could not get as much work done as "the company would have liked" so they laid him off. The spring in McConnell Valley was washed out in 1970. He and another man spent a day digging it out so that it could work on an emergency basis. He went back to work in April 1975 for \$500 a month, with the same understanding that it was a part-time job. Found that all new types of chlorinators were in use and he was unfamiliar with the exact operation and rate of chlorination. This resulted in a variation of chlorination, some high and some low. When he again inquired about the hours and his salary he was informed by a memo from Guerneville: "Your pay is not determined by the hours required, but your value to the

company, so keeping expenses low and profits higher is the best way to insure a salary increase. Last year we showed a good profit, but only due to a tax write off. This year the budget will no doubt call for a profit equal to the salaries paid."

Had difficulty in getting approval for maintenance and improvement, because the Sacramento office many times refused to authorize the requests. Had difficulty locating meters and in many cases they had to be cut out.

When volunteer fire department has its drills it stirs up the water and pushes up sediment in the old pipes causing the water to discolor. At various times sent lists of suggested improvements to Guerneville office, but they were never acted on.

4. Richard W. Gimpel

Has been a resident of Inverness for 29 years. Took photographs during 1972 and 1974. Put in his own filtering system five years before because the water was so turbid. Slides show a dirty filter. Has to change filter almost once a month. Slides show bathtub with dirty water. The dirty water came through the filter. Slides show water taken from a main service pipe that had discolored an old towel. On July 7, 1972, he wrote a letter to the Commission complaining about the dirty water. Has experienced water outages.

5. John F. West

Was a weekend resident of Inverness from 1969 to 1971 and has been a permanent resident since then. Has experienced water outages at least two or three times a year. Keeps an emergency supply of water in the house. Over a year ago a pipe burst near his neighbor's house sending a geyser of water 25 feet into the air. The local plumber cut in a new section of pipe that was left exposed and still remains exposed. Fire hydrants in the vicinity of Number 9 Cameron Street burst or failed. Approximately a year ago he called to report a leak and a recording informed him to call Guerneville. He did so and was charged for a long-distance call. A repair crew appeared five or six hours after he placed the call. Their maps did not show sufficient information about the location of

the water mains and the repair men did not know the location of the valves. The water is often muddy or turbid after a heavy rainstorm. On three occasions observed leaking pipes near his residence. One pipe was uncovered and he covered it with dirt. Although the pipes are old and deeply pitted with corrosion they are merely repaired with patches. Has observed the springs while out hiking and in his opinion they are contained by pieces of wood held together by sheet metal and old inner tubes. A sediment collection tank had water spouting between the boards. A lot of these facilities have been replaced this year.

6. Dr. Joseph A. Moore

Built a home in Inverness in 1940 and has been a permanent resident since 1971. Had to install a booster pump in 1940 because of poor pressure. When water from the Tenny Tank goes off, his pump continues to operate. When he complained he was informed that he should put a Mercury valve on the pump that would shut the switch off when no water is delivered to the pump. Had nine water outages in 1974 and 1975. When he inquired as to the cause he was given various explanations. The tanks have to be at least half full before he can get water to his pump. At times there is sediment in the water and on occasions too much chlorine. A filter plant was installed in 1975.

7. Robert W. Lafore, Jr.

Has been a resident of Inverness since 1974. Was without water for at least five days during the summer of 1975. Experienced frequent episodes of low water pressure. The water just dribbled out of the tap. Was told that the trouble was attributable to a faulty booster pump that was used to pump water from a tank situated across the valley on the same elevation as his house. Has had some water discoloration. The chlorine is a more serious problem. On one occasion the fumes were so strong that he could not take a shower for a week. A representative from the Department of Health checked the chlorine content and told him that it was a hundred times greater than normal. When he asked applicant to do something about the problem it was corrected, but he still experiences fluctuations in the chlorine content. This problem was experienced in 1975 when new filter-chlorinators were being installed.

8. Mr. Richard E. Flint

Was employed by applicant from 1973 to late 1974. He replaced Mr. Booras, who told him about the job. Is a telegraph operator by trade. Had no prior water utility experience. Was paid \$500 a month and was given no training except that Mr. Booras took him around the system pointing out the locations of certain springs, and showing him how to operate the chlorinators. Had maps, but they were not up to date. Spent much time cleaning the catch basins some of which had no covers and the covers on others were dilapidated. During a few rainstorms had to hike four or five times a day to the spring in McConnell Valley (Lower Sea Haven) and clear it so that it could flow. Requested Guerneville to place screens and new covers on the catch basins.

On several occasions requested Guerneville for the service of an extra man to help with the work and also so that someone from the Guerneville office would be familiar with the Inverness system in case he was incapacitated.

The primary complaint received from customers related to chlorine. There were some complaints about low water pressure from those living in the higher elevations of First Valley. Spent considerable time fixing leaks in old pipes. One pipe was so old it just collapsed when a clamp was placed on it. He finally had to put in a 30-foot section of new pipe. Left in September, 1974 because he had a job offer in his own trade. While he was on the job, new covers were put over part of the springs, but he was not there when the new filter plant was installed.

9. Mr. David Plant

Permanent resident of San Francisco and owns commercial property and businesses in Inverness. The Inverness Water Committee was formed in 1974 and he was made chairman. The committee was formed because many of the members were concerned about the problems of water shortage, water purity, and water pressure.

Had meetings with representative of applicant, but the meetings were not fruitful.

The committee was concerned about problems relating to the installation of the filtering plant, because

applicant commenced without permits from the county and the Coastal Commission. Applicant was also building a road across private property without the owner's permission and without taking steps to preserve the creek bed. After the plant was constructed, the association sought assistance from the Public Utilities Commission and the Department of Health. The Coastal Commission ordered applicant to cease any expansion pending the filing of a master plan. Solicited funds from the residents of Inverness and received \$7,880 from 160 contributors.

Has on numerous occasions corresponded with the Department of Health requesting that applicant submit a master plan of improvements.

On August 25, 1975 he contacted the Public Utilities Commission and stated that there was a concern about the adequacy of water during the forthcoming Labor Day weekend and asked that applicant notify the people about conserving water. Nothing was done and they ran out of water. The first time applicant sent out a notice to conserve water was in June of 1976. Had water shortages in Inverness when water was still flowing down First Valley Creek and Second Valley Creek into Tomales Bay. The available water was not being captured. It slipped by the diversion dam. Sent a petition to the Governor's office on September 12, 1975. Was subsequently informed that a new filter plant had been installed and because of difficulty with a valve a water outage resulted. Applicant procrastinated for 10 years before installing the filter plant. The committee appeared before the Coastal Commission and delayed installation of the filter plant only because applicant had not submitted a long-range plan. Has met and corresponded with representatives of the Department of Health in an effort to accomplish the purposes of the committee in obtaining a master plan from applicant. The committee would like to see a well-managed responsible company operate in accordance with the needs and concerns of the community. It wants a master plan for the water company that is backed up by a sound engineering study with priorities, timetables, costs, and community input. The committee members are willing to pay rates that are commensurate with the service received. Took photographs of exposed and rusty water mains, diversion springs, and tanks. (Exhibits 8 and 9.)

Pursuant to a request of the Department of Health applicant retained the firm of Raymond Vail and Associates to conduct an engineering study of the Inverness system. The report of January 1977 was received as Exhibit 11 and sets forth 12 recommendations which would cost an estimated \$400,600 based upon cost levels as of December 1976.

Essentially, they constitute a plan for providing filtration of the surface sources not now being treated, for the installation of proportioned chlorination facilities, and for the replacement of mains.

The Department of Health agrees with the recommendations and believes that they should be implemented. In order of priority the department suggests that the first seven recommendations should be given first consideration. The estimated cost of these improvements is \$150,000.

According to applicant it will proceed with implementing the recommended improvements provided they are approved by the Commission, and the Commission authorizes revenues to compensate it for the additional investment required.

Applicant's general manager testified that \$78,125 was expended for plant improvements in 1976; that a new filter plant was constructed in 1975 pursuant to the request of the Department of Health; that because the department insisted upon immediate construction during the peak summer period of 1975 many severe problems were created relating to pressure and water quality; that approximately 70 percent of the water is now being treated by the new plant; that in accordance with the Vail report the remaining 30 percent will be treated by separate treatment plants to be built for each major source of supply other than Barrel Springs; that difficulties were experienced in finally finding a person possessing the qualifications, the ability, and the interest to

perform the job of local representative; that as a result there was a constant turnover; that such a person has finally been employed; and that difficulty with the maps do exist because of the age of the system and the inaccuracies contained in the maps acquired from the prior owner.

Rate of Return

The staff's recommended rate of return of 9 percent on adopted rate base and a rate of return on common equity of 9.3 percent would be reasonable, if applicant were providing an adequate level of service and water quality. The record in this proceeding clearly demonstrates that applicant's water quality and service are below a minimum standard and inadequate.

Water quality and service are important considerations in the Commission's determination of a fair rate of return. Since we anticipate a marked improvement in the future in the water quality and service provided by applicant, it would be unreasonable to set an ultimate rate of return at this time. Upon certification by the Executive Director that all improvements required by the to-be-approved plan have been completed, an appropriate rate of return, and rates consistent with that rate of return, will be adopted.

Nevertheless, the applicant is in need of some additional revenues at this time. Accordingly, \$11,900 in additional revenues, together with rates consistent with such an increase, will be authorized herein. Such increase will result in an interim rate of return of 4.25 percent.

Operation and Maintenance Expense

The detailed estimates of applicant and staff were identical as tabulated below:

<u>Item</u>	<u>Applicant</u>	<u>Staff</u>	<u>Applicant Exceeds Staff</u>
	(Dollars in Thousands)		
Salaries	\$16.5	\$16.5	\$ -
Purchased Power	1.6	1.6	-
Materials, Services, & Misc.	3.5	3.5	-
Customer Accounting Misc.	1.0	1.0	-
Transportation	1.6	1.6	-
Telephone & Telegraph	.7	.7	-
Uncollectible Accts.	<u>.2</u>	<u>.2</u>	<u>-</u>
Total	\$25.1	\$25.1	\$ -

Administrative and General Expenses

A summary of administrative and general expenses is as follows:

<u>Item</u>	<u>Applicant</u>	<u>Staff</u>	<u>Applicant Exceeds Staff</u>
	(Dollars in Thousands)		
Administrative Office Expenses	\$ 4.0	\$ 2.2	\$ 1.8
Common Plant Expenses	.9	.4	.5
Legal & Regulatory Expenses	6.0	.9	5.1
Insurance	.1	.1	-
Injuries and Damages	.8	.8	-
Welfare	3.6	3.5	.1
Misc. & Per Diem	<u>.1</u>	<u>.1</u>	<u>-</u>
Total	\$15.5	\$ 8.0	\$ 7.5

Administrative office and common plant expenses are from two sources, Stamford, Connecticut, and Redding, California. Services including general management and supervision, engineering, accounting financial, legal, and others are performed in Stamford, Connecticut, by Citizens-Delaware for its subsidiaries. Certain management and supervisory, accounting, billing, and other reporting services for Citizens Utilities Company of California (Citizens-California) and its California affiliates, including applicant, are performed at an administrative office in Redding, California. In addition, certain plant in the Sacramento office of Citizens-California is used for the benefit of all water operations of that company and affiliate water companies in California.

Presentation on the allocation of these costs to California for the year 1976 was presented by applicant and the staff in the application of Jackson Water Works, Inc. (Application No. 55430). By stipulation the testimony of witnesses appearing on behalf of the applicant and the staff relating to those allocated costs was received in this proceeding by reference. By Decision No. 87609 dated July 19, 1977, in Application No. 55430, the Commission set forth the total allocation of \$465,000 to all California operations of the Redding and Stamford mutual service accounts. Of that amount .49 percent or \$2,279 was allocated to applicant.

In the same proceeding, the Commission adopted \$33,400 as the total allocation to all California operations of the Sacramento common utility plant of which 1.37 percent or \$458 was allocated to applicant. We, therefore, adopted the estimate of \$2,280 for administrative office expense and the estimate of \$460 for common plant.

Staff's estimate of \$900 for legal and regulatory expense is \$5,100 less than applicant's estimate. Because the staff expected applicant to use house counsel, the staff excluded all attorney's fees and salaries of Stamford, Redding, and Sacramento personnel who participated in the preparations of this proceeding. Staff considered those costs as part of the allocated expenses. Applicant's estimate included direct costs for such personnel, claiming it was in conformity with the recommendations made by the Commission's Finance Division as set forth in Exhibit 27. The recommendations relating to the allocation of Stamford, Redding, and Sacramento expenses are intended for future proceedings whereby accurate records will be available which will facilitate the future direct assignments of as many mutual service expenses as possible. These procedures are not presently in effect nor are accurate records for making direct assignment of costs presently available.

With regard to these accounting procedures recommended by the Commission's Finance Division it should be noted that Ordering Paragraphs 3 and 4 of Decision No. 87609 dated July 19, 1977 (Jackson Water Works, Inc.) read as follows:

- "3. All cost accounting procedures of the administrative and office costs and expenses that are allocated by Citizens Utilities Company (Citizens-Delaware) to its California subsidiaries, including applicant herein, shall conform to the staff recommendations set forth in Exhibit 17.
- "4. Failure to conform to the staff recommendations set forth in Exhibit 17 will result in disallowance of all administrative and office expenses that are allocated to the California subsidiaries of Citizens-Delaware effective one year from the date of this order."

Applicant herein is clearly one of the California subsidiaries referred to and as such is put on notice that the above order is still operative and will be applied to this district by this order.

Staff allowed expenses for a two-day hearing including transcript, travel, and miscellaneous expenses, which it spread over three years. Applicant in fact used outside counsel and the hearing lasted four days. We believe that a reasonable amount for the costs considered by the staff for a four-day hearing using outside counsel would be \$4,200 amortized over a period of three years.

Pursuant to an order issued by Commissioner Robert Batinovich, Citizens Utilities Company contracted for a management study, the results of which were the subject of Decision No.87608. Decision No. 87608, as amended by Decision No. 87776 authorized \$23,900 for the cost of the study to be allocated among the ten California subsidiaries of Citizens over five years. Of the total cost 1.63 percent or \$78 was allocated to applicant. We, therefore, adopt the estimate of \$78 for the management study expense and have included it herein under regulatory and legal expenses.

Taxes Other Than Income Taxes

<u>Item</u>	<u>Applicant</u>	<u>Staff</u>	<u>Applicant Exceeds Staff</u>
	(Dollars in Thousands)		
Ad Valorem Taxes	\$10.3	\$ 8.5	\$ 1.8
Payroll Taxes	<u>1.3</u>	<u>1.3</u>	<u>-</u>
Total	\$11.6	\$ 9.8	\$ 1.8

The staff's estimate of Ad Valorem taxes was based on its estimate of the assessed value of the net plant, including rollback adjustments. Applicant calculated Ad Valorem taxes on the basis of capitalized earnings. Staff's estimates will be adopted with an additional \$360 due to the finding of additional gross plant as discussed, infra, under Rate Base.

Income Taxes

Both applicant and staff followed the same procedures for determining tax depreciation; straight-line for federal taxes, and liberalized on a flow-through basis for state taxes. Staff's estimate is \$5,015 higher because of the difference in the estimates for expenses and for taxes other than income.

The staff recommended that, pending the outcome of the rehearing of Applications Nos. 51774 (The Pacific Telephone and Telegraph Company) and 51904 (General Telephone Company of California) relating to the ratemaking treatment of federal income tax depreciation and investment tax credit, applicant be ordered to maintain its customer records as may be appropriate to implement customer refunds if the method of determining tax depreciation prescribed by the Commission in those proceedings differs from the method used by staff and applicant in this proceeding.

The Commission has now issued its decision in those matters (Decision No. 87838 dated September 13, 1977). Among other things, the Commission found:

"Under the normalization method we are adopting for ratemaking purposes, tax depreciation expense for ratemaking purposes will be computed on a straight-line basis while federal taxes will be computed on an accelerated depreciation basis. The difference between the two tax computations will be accounted for in a deferred tax reserve. The average sum of the test year deferred tax reserve and the deferred tax reserve for the three next subsequent years shall be deducted from rate base in the test year. As a result of each of the deductions from rate base federal tax expense will be recomputed on the same basis in the test year for the test year and the three corresponding subsequent years, thus matching the estimated tax deferral amount for each period with the estimated federal tax expense for the same period. This method complies with Treasury Regulation 1.167(l) - (l) (h) (6) and is normalization accounting." (Mimeo. page 48.)

Accordingly, the treatment of tax depreciation and investment tax credit found reasonable in Decision No. 87838 has been applied herein and will be applied in all future rate proceedings for all subsidiaries and affiliates of Citizens Utilities Company. The adopted reserve for deferred taxes is \$4,800.

Rate Base

Applicant estimates rate base at \$322,180; the staff's original estimate was \$313,910. Following submission, and in response to a motion by Inverness Water Committee, the Finance Division of the Commission conducted a special audit of Inverness Water Company for the period January 1, 1968 through December 31, 1976. A report thereof was received as late-filed Exhibit 41.

According to the audit, applicant's recorded net plant in service, as of December 31, 1976, amounted to \$323,881; however, the staff in Exhibit 41 made adjustments reducing net plant investment by \$13,231.

On May 25, 1977, applicant filed a petition requesting that the matter be reopened for the purpose of introducing a document entitled "Response to F&A Report". The proceeding was reopened pursuant to an Examiner's Ruling and further hearing was held on June 10, 1977 at San Francisco.

The accounting exceptions taken by the staff and applicant's response thereto are as follows:

Exception 1

The new filtration plant went into service in November 1975 and, applicant is still carrying the Tenny Tank, Barrel Springs, and Colby Tank on the books. The staff contends that these facilities should have been retired. Applicant claims that Tenny Tank represents a structure which formerly housed a chlorination unit and is now used for the storage of chlorine and tools; however, a photograph taken by Mr. David Plant during the first week of June 1977 depicted an empty shed. Applicant also claims that the Barrel Springs facilities were not replaced by the new filtration plant and are presently being used to treat the Barrel Springs water supply. In addition applicant claims that the Colby Water Treatment Equipment is now being used at the Lower Sea Haven booster facility, where it replaced a chlorinator which is being reconditioned for use on a standby or backup basis.

The Tenny Tank facility will be excluded from rate base and the Barrel Springs, as well as the Colby Tank facility, will be included.

Exception 2

The staff excluded Johnson Well No. 2 and Griffith Well. Applicant admits that the Johnson Well no longer produces sufficient water to enable it to be used within the system and that it should be retired. The Griffith Well, it claims, does produce valuable and useful quantities of water and can be used for emergency and fire fighting purposes. According to applicant the pump on this well has been reconditioned, and a sanitary seal has been installed from the surface to the first impervious clay stratum.

The Johnson Well will be excluded and the Griffith Well will be included.

Exception 3

In 1976, \$313 for labor and overhead was capitalized in Account No. 312, Collection, and Impounding Reservoirs. Said charges were for three horizontal holes drilled into the side of a hill to obtain water from underground aquifers. It was the staff's understanding that the borings could not be used because applicant was unable to complete drilling horizontally. According to applicant the work was suspended because of the diminished water levels due to drought conditions and will be resumed when normal water conditions prevail.

The amount of \$313 expended to date will be retained in construction work in progress.

Exception 4

The exception relates to miscellaneous equipment and a 10,000-gallon redwood tank that has collapsed.

According to the staff, an Upper Sea Haven piston pump and a Jacuzzi booster at the Colby Tank are missing. The staff also contends that applicant has included a hydro-matic pump and a 14-inch chain saw that was located at the Guerneville District.

According to applicant the Jacuzzi has been transferred from the Colby Tank site to the Taylor Tank site. The pump and saw were assertedly being used in a service truck from Guerneville, which was assisting in Inverness, and through inadvertence were not removed when the truck returned to Guerneville. Applicant claims that they have since been returned to Inverness.

The missing Upper Sea Haven pump and the collapsed 10,000-gallon tank will be excluded. The Jacuzzi and hydro-matic pumps, and saw will be included.

Exception 5

This exception relates to the Colby Tank improvements.

During the course of hearing, the Inverness Water Committee introduced the testimony of Mr. Michael Mery for the purpose of showing that applicant had falsified records. Mr. Mery testified that he was engaged as a carpenter to do some work on five water tanks; that the

work consisted of repairing tank tops and the installation of screened vents; that he submitted a bill for \$1,200 of which \$800 was for maintenance and \$400 for improvements; that after a month and a half he had not been paid; that when he contacted applicant's local representative he was informed that the bill would be paid when he signed a resubmitted bill; and that applicant made out a new bill completely reversing the allocation.

According to the record only two bills were submitted, one for \$325 for work done on the Sea Haven Tank and one for \$650 for work done on the Colby Tank (Exhibit 34). The bills made no allocation for maintenance and improvements. The Sea Haven bill, which was dated November 25, 1974, was paid by check dated December 5, 1974. According to applicant the Colby bill was not acceptable as presented and was typed by applicant as an accommodation to Mr. Mery and was paid by check dated January 7, 1975.

The staff is of the opinion that applicant erroneously capitalized the cost for reroofing the Colby water tank. According to the staff the Uniform System of Accounts provides that when work is performed specifically for the purpose of preventing failure, restoring serviceability, or the maintenance life of storage facilities it should be charged to operating expenses.

Applicant claims that the work performed on the Colby Tank included additions and improvements, i.e., extending the roof and adding vents. The record indicates that the overhang ranges from 0 to 6 inches and appears to be attributable more to inaccurate sawing than to design.

The staff's recommendation that applicant amend its Accounts Nos. 342 and 250 is accepted.

Exception No. 6

This relates to 25 meters which, according to applicant's own books, were located in the Drake's Bay Beach Estates portion of the water system. The staff contends that applicant failed to retire \$818 from Account No. 346, (Meters) when the Drake's Bay portion of the system was sold. Applicant claims that only 18 meters were ever installed at Drake's Bay Beach Estates and 15 were recovered by applicant.

Applicant made no attempt, however, to explain the inaccuracy of its own records nor to identify by serial numbers the meters which it claims to have recovered.

During the period from January 1, 1970 to December 31, 1976, applicant used excessive AFUDC rates during construction. By Decision No. 81821 dated August 23, 1973, in Application No. 53178 the Commission authorized a rate of 7.5 percent for the above period and applicant's AFUDC rate varied from 9.00 percent to 10.50 percent. The staff's study indicates that \$818 in excessive AFUDC rates was capitalized by applicant.

The staff's recommendations to retire 25 meters located in the Drake's Bay Beach Estates and the disallowance for excessive AFUDC rates capitalized are accepted.

The following is a summary of applicant's estimate of average rate base and the staff's estimate, which reflects recorded value as of December 31, 1976, less \$5,288 for the adjustments herein considered:

<u>Item</u>	<u>Applicant</u>	<u>Staff</u>	<u>Adopted</u>
Utility Plant in Service	\$464,010	\$464,475	\$469,475
Reserve for Depreciation	<u>(94,550)</u>	<u>(84,294)</u>	<u>(84,294)</u>
Net Plant in Service	369,460	385,181	385,181
Common Plant	1,400	1,400	1,400
Materials and Supplies	-	-	-
Working Cash	8,260	6,760	6,760
Minimum Bank Balance	4,290	-	-
Non-interest Bearing C.W.I.P.	2,480	-	-
Advances for Construction	(54,080)	(54,080)	(54,080)
Contributions in Aid of Construction	(6,300)	(6,300)	(6,300)
Reserve for Deferred Taxes	<u>(3,330)</u>	<u>(3,330)</u>	<u>(4,800)</u>
Average Rate Base	\$322,180	\$329,631	\$328,160
	(Red Figure)		

Both applicant and the staff computed working cash by using the "simplified basis" prescribed by Standard U-16. The \$1,500 difference results from the different expense levels used in the computation. Staff's estimate will be accepted.

Applicant included \$4,290 for minimum bank balances which the staff completely excluded. This represents a portion of the amount of minimum bank balances Citizens-Delaware is required to keep with banks in order to acquire short-term financing at the prime rate.

Applicant argues that the effect of maintaining such compensatory bank balances is that the borrower pays interest at the total amount of a particular loan, but actually has the use of a lesser amount, the balance being maintained in its account with the bank. According to applicant its compensatory bank balances carry a legitimate cost, and since they are not included in the working cash compensations, nor in the capital, it is necessary to make allowances for them in the rate base. ✓

Applicant does not, itself, make any short-term borrowings. The balances are not directly related to the day-to-day activities of the applicant. The same disallowances were applied in Decision No. 76996 dated March 24, 1970 in Application No. 48905 (Guerneville District) and Decision No. 79915 dated April 4, 1972 in Application No. 54323 (Washington Water and Light Co.). The Commission's prior position will be followed and no minimum bank balance will be included.

Applicant determined the five-year average ratio of non-interest-bearing construction work in progress to total construction and applied this ratio to 1976 construction other than non-revenue producing additions. Applicant therefore included an amount of \$2,480. The staff made no such allowance because it rolled back to the beginning of the year many items of non-revenue producing additions. According to the staff, an item constructed near the end

of the year is given full credit when rolled back to the first of the year, whereas little credit would be given on the basis of a weighted average. The staff's position is reasonable and will be accepted.

Rate base in the amount of \$328,160 is reasonable and will be accepted.

Depreciation Expense

Both staff and applicant estimated depreciation expense to be \$10,950. An additional \$140 is appropriate due to the increase in gross plant discussed, supra, under rate base. Accordingly, the estimate of \$11,090 is reasonable and will be adopted.

Adopted Results

A summary of the earnings as computed and adopted for test year 1976 is as follows:

<u>Item</u>	<u>Applicant</u>		<u>Staff</u>		<u>Adopted</u>
	<u>Pres. Rates</u>	<u>Prop. Rates</u>	<u>Pres. Rates</u>	<u>Prop. Rates</u>	
Operating Revenues	\$53.1	\$93.0	\$53.1	\$93.0	\$65.0
<u>Operating Expenses</u>					
Operation & Maintenance	24.2	25.3	25.2	25.3	25.3
Administrative & General	15.7	15.7	8.2	8.2	8.8
Taxes Other Than Income	7.4	11.5	9.8	9.8	10.2
Depreciation	10.9	10.9	10.9	10.9	11.1
Income Taxes	-	5.8	(10.0)	10.8	(4.4)
Total Expenses	59.3	69.4	44.1	65.2	51.0
Net Operating Revenue	(6.1)	23.5	8.9	27.8	14.0
Rate Base	332.1	322.1	313.9	313.9	328.2

(Red Figure)

Authorized Rate Schedules

In converting from a minimum charge to a service charge rate schedule for an increase of this magnitude, we will authorize an inverted rate schedule with two quantity blocks. With a 5/8 x 3/4-inch service charge of \$7.00 and a rate of \$0.90 per 100 cubic feet, the increase for customers using a lifeline quantity of 300 cubic feet per month will be 14 percent. To recover a 22 percent increase in revenues, the cost to the average and larger customers exceeds 22 percent as shown in the following comparison of bills at the present and authorized rates.

<u>Usage Cu. Ft.</u>	<u>Present Rates</u>	<u>Authorized Rates</u>	<u>Percent Increase</u>
0	\$ 8.50	\$ 7.00	-21%
100	8.50	7.90	- 8
200	8.50	8.80	+ 4
300	8.50	9.70	+14
400	8.50	10.60	+25
600 (Average)	10.10	13.28	+31
800	11.70	15.96	+36
1,000	13.30	18.64	+40
2,000	20.30	32.04	+58
5,000	41.30	72.24	+75
10,000	76.30	139.24	+82

Findings

1. Any order entered herein should be on an interim basis. Upon certification by the Executive Director to the Commission that he has approved a plan for improvements to applicant's system including associated costs and timetable, rates under this interim order will become final without further order of the Commission.

2. Applicant is in need of additional revenues, but the proposed rates set forth in the application are excessive.

3. The adopted estimates previously discussed herein, operating revenues, operating expenses, and rate base for the test year are reasonable.

4. Applicant's level of service and water quality are inadequate.

5. Applicant should prepare a three-year plan of system improvements, including associated costs and timetable, giving significant consideration to the recommendations of the Department of Health as set forth in Exhibit 10 and to the improvements recommended by Raymond Vail and Associates as set forth in Exhibit 11.

6. Upon approval of the plan and timetable by the Executive Director and in accordance with the timetable established therein, applicant will be required to implement all phases of the plan according to the established timetable.

7. Upon certification by the Executive Director that all improvements required by the approved plan have been completed, the Commission will hold further hearings to determine a fair rate of return.

8. The increases in rates and charges authorized herein totaling \$11,900 are justified and reasonable under the circumstances.

9. The record fails to demonstrate that applicant falsified records; however, applicant should adjust its books to reflect the staff's adjustments as set forth in paragraphs 9 through 23 of Exhibit 41, consistent with the exceptions herein discussed.

10. An interim rate of return of 4.25 percent is just and reasonable under the current service conditions.

Conclusion

The application should be granted to the extent hereinafter set forth in the following order.

INTERIM ORDER

IT IS ORDERED that:

1. Inverness Water Company is authorized to file the revised schedules of general metered service attached to this order as Appendix A, and concurrently to cancel its present schedule for general metered service. Such filings shall comply with General Order No. 96-A. The effective date of the new and revised tariff schedules shall be four days after the date of filing. The new and revised schedules shall apply only to service rendered on and after the effective date hereof.
2. Within one hundred and twenty days after the effective date hereof, applicant shall submit to the Commission staff a three-year plan of system improvements including associated costs and timetable giving significant consideration to the recommendations set forth in Exhibits 10 and 11.
3. Upon approval of the plan by the Executive Director of the Commission and in accordance with the timetable established therein, applicant shall make the necessary improvements.

4. Applicant shall adjust its books to reflect the staff's adjustments as set forth in paragraphs 9 through 23 of Exhibit 41 consistent with the exceptions noted in the opinion.

5. All cost accounting procedures of administrative and office costs and expenses that are allocated by Citizens Utilities Company (Citizens-Delaware) to its California subsidiaries, including applicant herein, shall conform to the staff recommendations set forth in the proceedings in Jackson Water Works, Inc., in Application No. 55430 (Exhibit 17) as previously ordered in Decision No. 87609. Failure to do so will result in disallowance of all administrative and office expenses that are allocated to the California subsidiaries of Citizens-Delaware effective July 19, 1978.

6. All petitions and motions filed and made in this proceeding and not heretofore ruled upon are hereby denied.

7. This order will be entered on an interim basis. Upon certification by the Executive Director that all improvements required by the approved plan have been completed, the Commission will hold further hearings to determine a fair rate of return.

The effective date of this order shall be twenty days after the date hereof.

Dated at San Francisco, California, this 22nd day of November, 1977.

*I will file a dissent.
William Fuoro, Jr.*

Robert B. Berman
President

Vernon L. Sturgeon
Richard D. Howell
Clair L. DeBrick
Commissioners

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Schedule 1A

ANNUAL METERED SERVICE

APPLICABILITY

Applicable to all metered water service furnished on an annual basis.

TERRITORY

Inverness and vicinity, Marin County.

RATES

Annual Service Charge:	<u>Per Meter Per Year</u>
For 5/8 x 3/4-inch meter	\$ 84.00
For 3/4-inch meter	92.40
For 1-inch meter	126.00
For 1 1/2-inch meter	176.40
For 2-inch meter	226.80

Monthly Quantity Rates:	<u>Per Meter Per Month</u>
First 400 cu.ft., per 100 cu.ft.	\$.90
Over 400 cu.ft., per 100 cu.ft.	1.34

The service charge is applicable to all service. It is a readiness-to-serve charge to which is added the charge, computed at the Quantity Rates, for water used during the month.

SPECIAL CONDITIONS

1. The annual service charge applies to service during the 12-month period commencing January 1, and is due in advance. If a

(Continued)

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Schedule 1A

ANNUAL METERED SERVICE

SPECIAL CONDITIONS (Continued)

permanent resident of the area has been a customer of the utility for at least 12 months, he may elect, at the beginning of the calendar year, to pay prorated service charges in advance at intervals of less than one year (monthly, bimonthly, or quarterly) in accordance with the utility's established billing periods for water used in excess of the monthly allowance under the annual service charge. When meters are read bimonthly or quarterly, the charge will be computed by doubling or tripling, respectively, the number of cubic feet to which each block rate is applicable on a monthly basis.

2. The opening bill for metered service, except upon conversion from flat rate service, shall be the established annual service charge for the service. Where initial service is established after the first day of any year, the portion of such annual charge applicable to the current year shall be determined by multiplying the annual charge by one three-hundred-sixty-fifth ($1/365$) of the number of days remaining in the calendar year. The balance of the payment of the initial annual charge will be credited against the charges for the succeeding annual period. If service is not continued for at least one year after the date of initial service, no refund of the initial annual charges shall be due the customer.

Schedule No. 4

PRIVATE FIRE PROTECTION SERVICE

APPLICABILITY

Applicable to all water service furnished to privately owned fire protection systems.

TERRITORY

Inverness and vicinity, Marin County.

RATE

Per Month

For each inch of diameter of service connection ... \$ 1.85

SPECIAL CONDITIONS

1. The fire protection service connection shall be installed by the utility and the cost paid by the applicant. Such payment shall not be subject to refund.
2. The minimum diameter for fire protection service shall be two inches, and the maximum diameter shall be not more than the diameter of the main to which the service is connected.
3. If a distribution main of adequate size to serve a private fire protection system in addition to all other normal service does not exist in the street or alley adjacent to the premises to be served, then a service main from the nearest existing main of adequate capacity shall be installed by the utility and the cost paid by the applicant. Such payment shall not be subject to refund.
4. Service hereunder is for private fire protection systems to which no connections for other than fire protection purposes are allowed and which are regularly inspected by the underwriters having jurisdiction, are installed according to specifications of the utility, and are maintained to the satisfaction of the utility. The utility may install

(Continued)

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Schedule No. 4

PRIVATE FIRE PROTECTION SERVICE

SPECIAL CONDITIONS (Continued)

the standard detector-type meter approved by the Board of Fire Underwriters for protection against theft, leakage, or waste of water and the cost paid by the applicant. Such payment shall not be subject to refund.

5. The utility will supply only such water at such pressure as may be available from time to time as a result of its normal operation of the system.

Schedule No. 5

PUBLIC FIRE HYDRANT SERVICE

APPLICABILITY

Applicable to all fire hydrant service furnished to municipalities, duly organized fire districts and other political subdivisions of the State.

TERRITORY

Inverness and vicinity, Marin County.

RATES

	<u>Per Month</u>
For each wharf-type hydrant	\$ 1.20
For each standard hydrant	1.85

SPECIAL CONDITIONS

1. For water delivered for other than fire protection purposes, charges shall be made at the quantity rates under Schedule No. 1A, Annual General Metered Service.
2. The cost of installation and maintenance of hydrants shall be borne by the utility.
3. Relocation of any hydrant shall be at the expense of the party requesting relocation.
4. Fire hydrants shall be attached to the utility's distribution mains upon receipt of proper authorization from the appropriate public authority. Such authorization shall designate the type and the size of hydrants and the specific location at which each is to be installed.
5. The utility will supply only such water at such pressure as may be available from time to time as a result of its normal operation of the system.